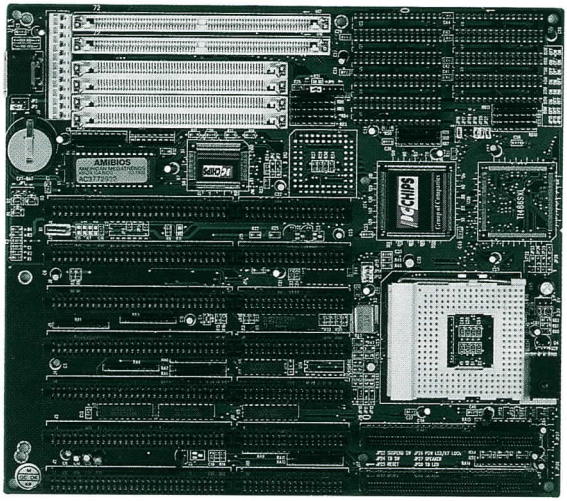
486 VESA MAINBOARD



KEY FEATURES

- Support Microprocessor running at 25/33/40/50/66/80/100/120Mhz
  -UMC 80486SX-SL -AMD 486DX/DX2/DX4 - Cyrix 80486SX/DX/DX2/DX4
  -INTEL 80486DX/SX/DX2/DX4-SL -INTEL 80486DX/SX/DX2 -Cryix 5x86
- CPU VCC Support 3.3V and 5V
- L1 write back or write through cache.
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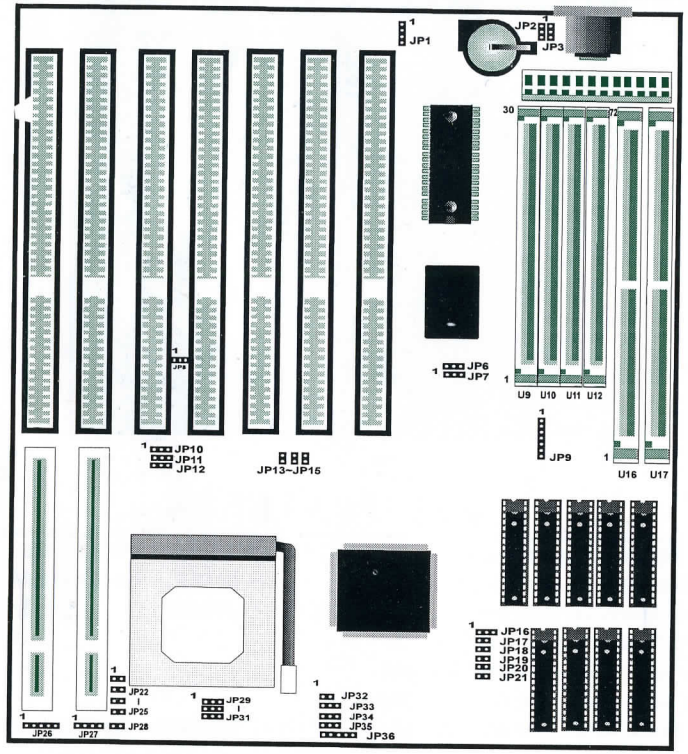
- Flexible cache RAM size 64/128/256/512/1024 KB in two banks or one bank with 16 bytes line size.
- DRAM auto-dectection / banking
- Four banks of DRAM with memory size up to 64 MB using combinations of 256K,1M,2M,4M,8M and 16M SIMM modules.
- Providing Green PC power management.
- Level 2 cache power saving.
- Fully support Microsoft APM (advance power management).
- Providing Flash ROM support.
- On-board CR2032 3V volt Llithium battery.
- ZIF socket.
- 2 VESA slots and 7 ISA slots.

MAINBOARD LAYOUT



MEMORY ARCHITECTURE

The DRAM sub-system contain 4 banks. Four 30-pin SIMM Socket U9-12 using as bank2; two 72-pin SIMM Socket. U16 using as bank 1 and 3; U17 using as bank 0 and 2.

NOTE

So You can not install 30-pin SIMM if using 2 banks type DRAM on to U17 and you can install 30-pin SIMM if using 1 bank type DRAM on to U17.

U9-U12	U17	U16
BANK 0	BANK 0 , 2	BANK 1 , 3
INSTALL	1 BANK TYPE DRAM OR NONE	2 BANKS TYPE DARM OR 1 BANK TYPE DARM OR NONE
NONE	2 BANKS TYPE DARM OR 1 BANK TYPE DARM OR NONE	2 BANKS TYPE DARM OR 1 BANK TYPE DARM OR NONE

Jumper Setting and Connectors

You can configure hardware options by setting jumper switches on the mainboard.
Set a jumper switch as follows:

- **Short a jumper by placing the plastic jumper cap over two pins of the jumper.**
- **Open the pins of jumper by remobing the jumper cap.**

Note

What you open the jumper, attach the plastic jumper cap to one of the pins so you won't lose it.

Symbols:

For setting 3-pin jumpers, the symbols below are used:

Pin 1 and 2 are Shorted with a jumper cap.

Pin 2 and 3 are Shorted with a jumper cap.

For setting 2-pin jumpers, the following symbols are used:

The jumper is Shorted when the jumper cap is placed over the two pins off the jumper.

The jumper is Open when the jumper caps is removed from the jumper.

JP1- External Battery Connector

The mainboard has a non-chargeable lithium battery on-board: however, you can also attach an external battery to connector JP1. Using an external battery helps you conserve the on-board battery.

DESCRIPTION	JP1
EXTERNAL BATTERY	
INTERNAL BATTERY	
CLEAR CMOS PINS 3 & 4 SHORT	

PIN 1 : VDD (6V) PIN 2&3 : Rechargeable Battery Pin PIN 4 : GND

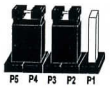
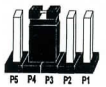
CAUTION

Please SHORT JP1 pin 2-3 before using your system mainboard. Manufacture default setting is on 3-4.

JP3 - Flash ROM VPP Supply Selector(Option)

DESCRIPTION	JP1
5 VOLT	
12 VOLT	

JP6-JP8,JP10-12,JP23,JP33-36 : CPU SELECTOR JUMPER

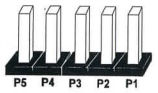
JUMPER\CPU	486DX/DX2	486SX
JP6		
JP7		
JP8	OFF	OFF
JP10		
JP11		
JP12		
JP23	ON	ON
JP33		OFF
JP34		
JP35		
JP36		

JP25 - RESET SWITCH CONNECTOR

Attach the Reset switch cable to this connector. The Reset switch restarts the system.
OPEN : NOT RESET
SHORT : RESET

JP26 - KEYLOCK & POWER LED CONNECTOR

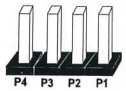
JP26 is keylock connector that enables and disables the keyboard and the Power-LED on the case.



Pin 1 : LED Power
Pin 2 : Not used
Pin 3 : Ground
Pin 4 : Keyboard Inhibiter
Pin 5 : Ground

JP27 - SPEAKER CONNECTOR

Attach the system speaker to connector JP18.



Pin 1 : Data Out
Pin 2 : Not Used
Pin 3 : Ground
Pin 4 : + 5V DC

JP28 - TURBO LED CONNECTOR

JP28 is usually connected to a Turbo LED on front of thesystem case. If the system board select is in Turbo mode,the indication lights during high-speed operation.

Pin 1 : + Anode
Pin 2 : -Cathode

JP13~JP15 - CLOCK GENERATOR SETTING

	20MHz	25MHz	33MHz	40MHz	50MHz	66MHz	80MHz
JP13	OFF	ON	ON	ON	OFF	ON	OFF
JP14	OFF	OFF	ON	ON	OFF	OFF	ON
JP15	OFF	OFF	ON	OFF	ON	ON	ON

JP22 - SUSPEND SWITCH CONNECTOR

In order to force system enter suspend mode, you can attach a push button to this connector.

JP24 - TURBO SWITCH CONNECTOR

OPEN : TURBO MODE
SHORT : LOW SPEED MODE
In addition to switching clock speed using hardware control via the turbo switch, you can also switch the clock speed using software control via keyboard commands.
he keyboard commands are as follows:

CTRL,ALT,[+] : Press these three keys simultaneously to select TURBO MODE.
CTRL,ALT,[-] : Press these three keys simultaneously to select LOW SPEED MODE.

NOTE

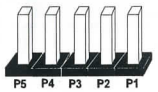
That hradware control and software control are alternately activated. Before you can activate software control from hardware control, and vice versa, the system must be in High Speed Mode.

JP29~31 - CPU VCC SELECTOR

	JP29	JP30	JP31
5 V			
3.3 V			

J 1 - KEYBOARD CONNECTOR

A standard five-pin female DIN keyboard connector is located at the rear if the board (J1). Plug the jack on the keyboard cable into this connector.



Pin 1 : Keyboard Clock
Pin 2 : Keyboard Data
Pin 3 : Spare
Pin 4 : Ground
Pin 5 : + 5V

J 9 - POWER SUPPLY CONNECTORS

The power supply connector has two six-pin male header connectors. Plug the dual connectors from the power directly onto the board connectors.

Pin 1 : Power Good
Pin 7 : Ground
Pin 2 : + 5V DC
Pin 8 : Ground
Pin 3 : + 12V DC
Pin 9 : - 5V DC
Pin 4 : - 12V DC
Pin 10 : + 5V DC
Pin 5 : Ground
Pin 11 : + 5V DC
Pin 6 : Ground
Pin 12 : + 5V DC

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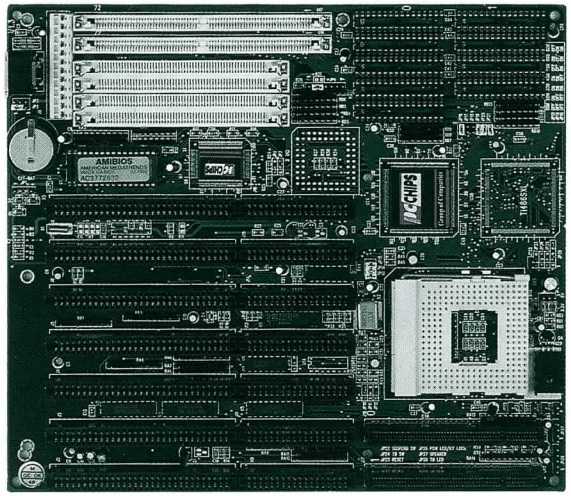

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